

REMARKS

The Office Action of July 2, 2003 has been carefully reviewed. Re-examination, reconsideration, and allowance of the application are requested in view of the above amendments and the following remarks and arguments.

ALLOWABLE SUBJECT MATTER

It is noted with appreciation that Examiner has stated that claims 1 - 6 have been allowed.

STATUS OF THE APPLICATION

The reissue application, as filed included eight (8) claims including two (2) independent claims.

Claims 1 – 6 have been allowed and remain as originally filed.

Claims 7 and 8 have been cancelled.

New claims 9 - 12 have been added.

Therefore, the application now includes ten (10) claims including two (2) independent claims, and no additional fee is required, as shown by the attached AMENDMENT TRANSMITTAL LETTER.

The amendments are supported by the application, claims and drawings as filed, and therefore do not constitute new matter.

PRELIMINARY COMMENTS

As a preliminary comment in support of the presently submitted amendment, please consider the following:

Applicant is a victim of Invention Submission Corporation (ISC). He contracted with ISC and was represented in the preparation and prosecution of the original application by attorneys selected by ISC. As a result, independent claim 1 of issued U.S. Patent 5,802,748, while precisely describing the best mode of the invention at the time that it was filed, was more detailed than was required to describe the generic concept. Now, new claim 9 provides such a generic claim of the invention. New independent claim 9 meets the requirements of 35 U.S.C. §112, 1st and 2nd paragraphs by “particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.”

New independent claims 9 – 12 set forth the elements of the apparatus in a more generic format. The terms used in new independent claim 9 are consistent with the terms used in allowed independent claim 1 and are supported by the application, claims and drawings as filed, and therefore do not constitute new matter.

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It is urged that Examiner find in the review of new claims 9 - 12 and of the prior art already present in the allowed application and as now applied by Examiner, that they would lead a person skilled in the art to which this invention pertains to the conclusion that the heart of the invention resides in the Provision of two spaced apart teeth carried at the front edge of a trenching bucket, which allow the bucket to simultaneously dig a pair of spaced apart tiered troughs.

With that structure present and now positively claimed in new claim 9, the presence of means for carrying two spaced apart teeth, it is clear that many of the limitations of claims 1 - 6 are not critical. In addition, claim 9 is easily within the generic skill of an artisan in the relevant field, and does not constitute new matter. By contrast, the limitations in original claim 1 of a "trenching plate", a "transverse bend", and "first and second plate portions" do nothing more than define a state of the art bucket. Similarly, the "planar side members" are not critical to the operation of the trenching bucket. It is therefore clear that every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant.

For the foregoing reasons, review, evaluation and allowance of the attached reissue application is requested, including new claims 9 - 12, in order to provide adequate claims and undo the iniquity of ISC.

RESPONSE TO DECLARATION DEFECT AND CLAIM DEFECT

Examiner has stated that that the reissue declaration filed with this application is defective on the basis that it does not identify the citizenship of the inventor and that claims 1 - 8 have been rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 for failing to identify the citizenship of the inventor.

This basis for rejection is traversed.

Examiner's review of the "SUPPLEMENTAL DECLARATION FOR REISSUE APPLICATION" has been incomplete. An annotated, highlighted true copy of the "Supplemental Declaration for Reissue Application" as filed is attached as Exhibit A. It shows, at paragraph 2, that the inventor is "a citizen of the United States of America". It is therefore requested that Examiner more completely review the original "SUPPLEMENTAL DECLARATION FOR REISSUE APPLICATION" in the file, that it be noted that it identifies the citizenship of the inventor, and that the alleged defect be found to be non-existent, that the rejection be withdrawn, and that claims 1 - 8 be allowed.

In the alternative, an annotated, highlighted true copy of the "DECLARATION AND POWER OF ATTORNEY" as filed with the original patent Application No. 679,851 on July 15, 1996 is attached as Exhibit B. It shows, at page 3 below the signature, that the inventor's Citizen is "UNITED STATES OF AMERICA". It is therefore requested that Examiner incorporate by the reference the citizenship of the inventor therein stated, and that the alleged defect be found to be non-existent, that the rejection be withdrawn, and that claims 1 - 6 and 9 - 12 be allowed.

RESPONSE TO DRAWINGS OBJECTIONS

The drawings have been objected to under 37 CFR 1.83(a) as failing to show every feature of the invention specified in the claims. The leading end edge, trailing end edge, and side edges of the bucket must be shown or the feature(s) canceled from the claim(s).

This basis for objection is avoided by new claims 9 - 12 and by cancellation of claims 7 - 8 which included the objected to terms "leading end edge", "trailing end edge", and "side edges of the bucket". New claims 9 - 12 do not use any of those terms, and instead use the same terms as allowed claims 1 - 6 and are supported by the drawings in the application.

Therefore there is no need to amend the drawings or specification to meet the requirements of 37 CFR 1.83(a), and no new matter has been added to the application, the objections to the drawings are avoided, and it is requested that claims 1 - 6 and 9 - 12 be allowed.

RESPONSE TO CLAIM OBJECTIONS

Claims 7 - 8 have been objected to because claim 7 recites the limitation "said first end edge" in line 6 and "said first leading end edge" in line 7 and "said leading edge" in line 8 lack sufficient antecedent basis since only the limitation "leading end edge" has been claimed, and because the term -a- should be inserted before "leading" on line 2 of claim 7. These basis for objection are now avoided since claims 7 - 8 have been cancelled, and new claims 9 - 12, include only the same terms as allowed claims 1 - 6. Therefore the objections to the claims are avoided, and it is requested that claims 1 - 6 and 9 - 12 be allowed.

RESPONSE TO CLAIM REJECTIONS UNDER 35 USC § 102(b)

Claim 7 has been rejected under 35 U.S.C. 102(b) as being anticipated by Clark U.S. Patent 3,724,899. Examiner has stated that Clark shows a tiered trenching system with a bucket 43 having leading, trailing, and side edges where a first tooth mounting means (left element 66 in figure 5) is secured to the leading edge in a direction substantially orthogonal (b, figure 2) to that edge and a second tooth mounting means (right element 66 in figure 5) secured to the leading edge parallel to the first tooth mount but spaced from the first tooth mount. Examiner has concluded that Clark anticipates claim 7.

This basis for rejection is traversed.

Clark does not teach a tiered trenching system, but rather it teaches a backhoe bucket for excavating a single trench in frozen earth using a single tooth 57. Single tooth 57 is secured to the bucket 30 by a pair of L-shaped keepers 66 and an stud 67 of a single tooth 57 to dig a single trench. Elements 43 are sidewalls (col. 3, line4), not a bucket, and L-shaped keepers 66 are not first and second tooth mounting means as Examiner has mistakenly alleged. As Examiner has applied the teaching and the elements of Clark in error, Clark does not anticipate claim 7 or new claim 9 under 35 U.S.C. 102(b) in the manner stated by Examiner, and it is requested that this basis for rejection be withdrawn, and that new claims 9 - 12 be allowed.

Furthermore, Clark alone or taken in combination with the other references fail to provide motivation as to why claims 9 – 12 would be obvious within the meaning of 35 U.S.C. 103(a), and such a rejection would not now be appropriate.

Claims 7 - 8 have been rejected under 35 U.S.C. 102(B) as being anticipated by Hensley 2,705,380. Examiner has stated that Hensley shows a tiered trenching system with a bucket 51 having leading, trailing, and side edges where a first tooth mounting means 12 (figure 7) is secured to the leading edge in a direction substantially orthogonal (figure 6) to that edge and a second tooth (other element 12 in figure 7) mounting means secured to the leading edge parallel to the first tooth mount but spaced from the first tooth mount. Examiner has further stated that Hensley shows means for coupling to removably attach a pair of teeth 14 (Figs. 4 and 5) to each first and second tooth mounts. Examiner has concluded that claims 7 - 8 are anticipated by Hensley.

This basis for rejection is traversed.

Hensley does not disclose a backhoe or a system for attachment to a backhoe. Rather it discloses a rooting tooth unit for attachment to a bulldozer (not a backhoe) for scraping a surface to remove roots, not to dig trenches, and especially not to dig tiered trenches. The system of Hensley cannot and does not disclose or provide a backhoe trenching function. A scraper system does not trench. Its scraper blades are not tiered. . Therefore, Examiner has applied the teaching and the elements of Hensley in error, Hensley does not anticipate claim 7 – 8, or new claims 9 under 35 U.S.C. 102(b) in the manner stated by Examiner, and it is requested that this basis for rejection be withdrawn, and that new claims 9 – 12 be allowed.

Furthermore, Hensley is a non-analogous mechanism to a tiered trenching backhoe. A person skilled in the art would have no motivation to look at a bulldozer scraping mechanism to provide a backhoe tiered trenching system, nor have any reason to modify such a scraper system to provide a backhoe function. The scraper blades taught by Hensley could not be mounted on a backhoe bucket. .Therefore, Hensley alone or taken in combination with the other references fail to provide teaching or motivation as to why claims 9 – 12 would be obvious within the meaning of 35 U.S.C. 103(a), and such a rejection would not now be appropriate.

Claims 7 - 8 have been rejected under 35 U.S.C. 102(b) as being anticipated by Hendricks 4,729,180. Examiner has stated that Hendricks shows a tiered trenching system with a bucket 11 (*sic*) having leading, trailing, and side edges where a first tooth mounting means 30 (left side of element 1 in figure 1) is secured to the leading edge in a direction substantially orthogonal (figure 3) to that edge and a second tooth mounting means 30 (right side of element 1 in figure 1) secured to the leading edge parallel to the first tooth mount but spaced from the first tooth mount. Examiner has further indicated that Hendricks shows means for coupling to removably attach a pair of teeth (Figure 3) indirectly to each first and second tooth mounts via element 2. Examiner has concluded that claims 7 - 8 are anticipated by Hendricks.

This basis for rejection is traversed.

Hendricks teaches a system for quick attachment of teeth to an excavating bucket, not to a backhoe. It does not teach such an excavating bucket (8) for a trenching backhoe. Figure 3 is a fragmentary view showing two teeth, not a pair of teeth, as the bucket utilizes ten teeth (Figure 1), not two. All of the teeth are carried by a single plate that is slipped on and connected to bucket (8), and the teeth are not individually connected to the bucket or to the plate. The problem solved by Hendricks is how to mount the plate on an excavating bucket using a single solid bar mounted on the cutting edge. The present invention teaches a different mounting system, but claims a tiered trenching system. The system of Hendricks teaches a system for excavating, not for tiered trenching. Therefore, Examiner has applied the teaching and the elements of Hendricks in error. Hendricks does not anticipate claim 7 – 8, nor new claims 9 - 12 under 35 U.S.C. 102(b) in the manner stated by Examiner, and it is requested that this basis for rejection be withdrawn, and that new claims 9 – 12 be allowed.

Furthermore, the system of Hendricks is a system for excavating and is non-analogous to a tiered trenching backhoe. A person skilled in the art would have no motivation to look at a system for excavating to provide a backhoe tiered trenching system, nor have any reason to modify such an excavating system to provide a backhoe function. Therefore, Hendricks alone or taken in combination with the other references fail to provide teaching or motivation as to why claims 9 – 12 would be obvious within the meaning of 35 U.S.C. 103(a), and such a rejection would not now be appropriate.

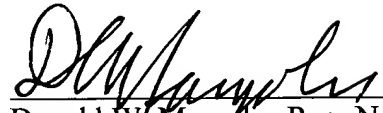
In conclusion, as reason for allowing claims 9 – 12 of the present application, as amended, is that the prior art of record fails to show or suggest a backhoe trenching a system for attachment to existing tooth shanks of a backhoe bucket for creating a dual trench, the system having a trenching plate having a first and a second end edge and having lateral side edges extending between the first and a second edges, a first coupler connected adjacent the first end of the plate and a second coupler connected adjacent the second end of the plate designed to be removably coupled to existing tooth shanks of a backhoe bucket, and a first and second spaced apart tooth mount secured adjacent to the first and second end of the trenching plate and projecting in a direction orthogonal to the lateral edges of the trenching plate, but spaced from the first tooth mount, each tooth mount designed to receive removably secured spaced apart replaceable trenching teeth when the system is attached to existing tooth shanks of a backhoe bucket, thereby allowing dual separated trench to be created. These novel limitations define over the cited references for the reasons set forth above.

CONCLUSION

In conclusion, it is believed that the present application is now in condition for allowance. Objections to the claims and drawings, and also rejections of claims under 35 U.S.C. §102(b) have been avoided by argument and amendment. No other objections or rejections to the application have been made. It is therefore requested that the amendments be entered and that the application be reexamined, reconsidered and allowed.

Should any issues remain, it is requested that Examiner telephone undersigned so that we may dispose of this application.

Respectfully submitted,



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Pat.amd

CERTIFICATE OF MAILING STATEMENT

I hereby certify that on this date this amendment is being deposited with the United States Postal Service as first class mail in an envelope with proper postage attached and addressed to:

**Mail Stop: Amendment - NON-FEE,
Commissioner for Patents
P.O. Box 1450
Alexandria VA, 22313-1450**


DONALD W. MARGOLIS, Reg. No. 22,045

November 3, 2003
Date



Exhibit A

COPY

SUPPLEMENTAL DECLARATION FOR REISSUE APPLICATION

Docket No.: P4380

As the below named inventor I hereby declare that:

Both my residence and post office addresses are as stated below, and I am a citizen of the United States of America;

I verily believe that I am the original, first, and sole inventor of the invention entitled: **TIERED TRENCHING BACKHOE SYSTEM**, which is described and claimed in the specification **filed** as a reissue application herewith;

I have reviewed and understand the contents of the specification filed as a reissue application herewith, including the claims, and the now preliminarily amended claims;

I do not know and do not believe that the invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof;

I acknowledge my duty to disclose, and I have disclosed, all information known to me to be material to the patentability of my invention as defined in 37 CFR §1.56;

Said invention has been patented and made the subject matter of **United States Patent 5,802,748** on an application filed in my name by me;

I hereby declare that such **United States Patent 5,802,748** is inoperative or invalid by reason of my claiming more or less than I had a right to claim in a patent, and more specifically, by claiming certain elements, including those set forth in "**ATTACHMENT A**" (incorporated herein by reference as though set forth in its entirety), in more specific detail than was necessary. These errors arose due to my attorney failing to appreciate the full scope of the invention. These errors were discovered by my present attorney. These errors arose without deceptive intention.

I hereby declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

My full name, current residence and post office address are:

RONALD G. HAAGENSTAD
119 Summer Heaven Drive.
Blackhawk, Colorado 80402-9032

RECEIVED
NOV 17 2003
GROUP 3600

September 8, 2000

RONALD G. HAAGENSTAD

COPY

Exhibit B.

Attorney's Docket No. K&A 97-0869
Client's Docket No. DCO661

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

TIERED TRENCHING BACKHOE APPARATUS

the specification of which is attached hereto.

I further state that I do not know and do not believe that the above-named invention has ever been known or used in the United States before my invention thereof, or patented or described in any printed publication in any country before my invention thereof, or in public use or on sale in the United States more than one year prior to this application; that the invention has not been patented or made the subject of any inventor's certificate in any country foreign to the United States on any application filed by me or my legal representatives or assigns more than six (6) months prior to this application; and that no application for patent or inventor's certificate on the invention has been filed by me or my representatives or assigns in any country foreign to the United States, except as identified below.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment if applicable.

I acknowledge the duty to disclose information to the Patent and Trademark Office all information known to me to be material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s) Priority Claimed

<u>NONE</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
(Number)	(Country)	(Day/Month/ Year Filed)	(Yes)	(No)

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States Provisional application(s) listed below:

<u>NONE</u>	<u> </u>
(Application No.)	(Filing Date)

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365 (c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, Section 112. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

<u>08/679,851</u>	<u>07/15/96</u>	<u>pending</u>
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys to prosecute this application and transact all business in the U.S. Patent and Trademark Office connected therewith: Ivar M. Kaardal, Registration Number 29,812.

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Attn.: Ivar M. Kaardal
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Full Name of Inventor: **RONALD G. HAAGENSTAD**

Ronald G Haagenstad
Inventor's Signature

Date: 5-2-97

Residence:

Citizenship:

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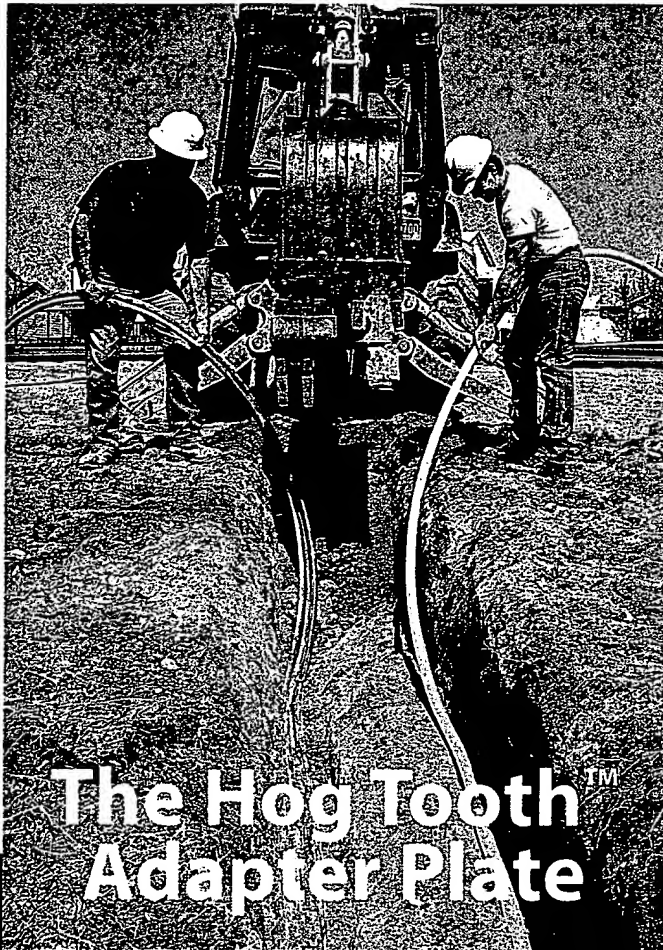
ATTACHMENT A

, a and do nothing more than define a state of the art bucket. Similarly, the “
The following elements were claimed in more specific detail than was necessary in
United States Patent 5,802,748

1. The “trenching plate” of claim 1;
2. The requirement of claim 1 for a “transverse bend”,
3. The “first and second plate portions” of claim 1; and
4. The “planar side members” of claim 1.


RONALD G. HAAGENSTAD

September 8, 2000



Cut Trenching Time by 50%!

*The **only** product specifically designed for joint placement of utility lines.*

The patented design of the **Hog Tooth™** enables you to:

REDUCE COSTS

- Fewer hours are needed for installation and repairs.
- Savings on one job will often pay for the product.
- Can greatly reduce insurance costs.

INCREASE JOB SAFETY

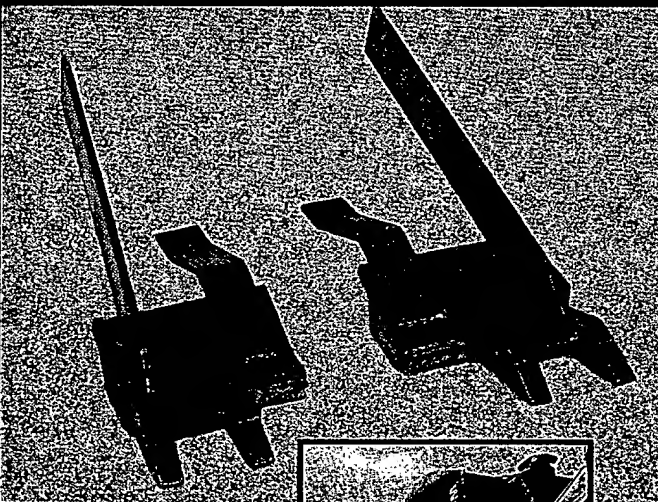
- The **Hog Tooth™** keeps workers out of the ditches, reducing the risk of cave-ins.
- Separates gas from other utilities, preventing life-threatening explosions.

INCREASE PRODUCTIVITY

- Utilities do not have to wait for trench shading or backfilling before laying pipe.
- Achieve two tier trenching in one operation.
- Cuts worker time in half.
- No shoring or sloping required.

INCREASE EFFICIENCY

- Standardize multiple use trenches.
- Bottom ground is undisturbed, preventing stretching of utility line.



THE HOG TOOTH™ BENEFITS

- Industrial companies will find it easier to compete, with less time and money required for each job.
- Field workers will find the tool both helpful and convenient, reducing their exposure to injury while increasing their productivity.
- Consumers will be more satisfied, as both initial installation and repairs can be completed quicker.

SPECIFICATIONS

- A 50 steel
- 8 inch wide plates
- 14 inch digging length per tooth
- Total length of each piece is 28 inches (including the mounting bracket)
- Weight: 75 pounds per piece

Bucket Size	Horizontal Separation
24"	8"
30"	14"
36"	20"

Note: 5/8" Grade 8 bolts are recommended for attachment of the Hog Tooth™ to the backhoe bucket.

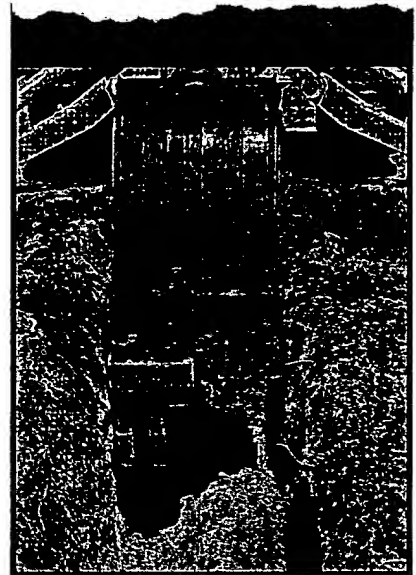
ENDORSEMENTS

"I am an instructor in Trenching and Shoring OSHA classes for our company. I find the concept of having the additionally higher, undisturbed bottom of the trench adds a level of safety very few devices could add, except for shoring."

— Claude Chapman, Safety Director, Sturgeon Electric, Inc.

"The biggest benefit for the gas department is by using this, we can put our pipe in and go to the next job. We don't have to wait for the electric guys to get the lift in and compact it."

— Tom Marks, Lead Service Fitter, Gas Construction,
Public Service Company of Colorado



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List Price: \$2,995 per set
Terms: 2%, 10; N30
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CONTACT



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Fax: 303-980-5565



US005802748A

United States Patent [19]**Haagenstad**[11] **Patent Number:** **5,802,748**[45] **Date of Patent:** **Sep. 8, 1998**[54] **TIERED TRENCHING BACKHOE SYSTEM**

[76] **Inventor:** Ronald G. Haagenstad, 119 Summer
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80403-9032

4,038,766 8/1977 Felsted 37/403 X
4,085,530 4/1978 Laundry 37/403 X
4,360,980 11/1982 Jarvis 37/404
4,550,512 11/1985 Felsted 37/403
4,704,811 11/1987 Jefferson 37/364
5,212,897 5/1993 Jefferson 37/403

[21] **Appl. No.:** 679,851[22] **Filed:** Jul. 15, 1996[51] **Int. Cl.⁶** E02F 3/96[52] **U.S. Cl.** 37/405; 37/403; 37/903;
414/724[58] **Field of Search** 37/403, 404, 405,
37/407, 903; 172/699; 414/724[56] **References Cited****U.S. PATENT DOCUMENTS**

2,838,856 6/1958 Buisse 37/404
2,864,184 12/1958 Fohr 37/404
2,896,343 7/1959 Raby 37/407
3,181,256 5/1965 Discenza 37/404
3,307,277 3/1967 Kondracki 414/724 X
3,478,449 11/1969 Baker 37/403
3,942,271 3/1976 George 37/404
4,009,529 3/1977 Johnson 37/404

Primary Examiner—Terry Lee Melius*Assistant Examiner*—Thomas A. Beach[57] **ABSTRACT**

A new Tiered Trenching Backhoe System for creating a dual tiered trench which allows one service utility to be elevated above another service utility thereby preventing contact of the two service utilities resulting in increased safety. The inventive device includes a syncline plate with an interior angle of approximately 140 degrees, a first and second triangular coupler welded at one end to the syncline plate removably coupling to a pair of existing tooth shanks of a backhoe bucket, a first and second fluke welded to the syncline plate opposite of the triangular couplers, a first and second trihedral support members welded to the interior portion of syncline plate providing support, and a pair of replaceable teeth removably secured to the first and second flukes.

6 Claims, 3 Drawing Sheets